701 E. Chocolate Avenue, Suite 200, Hershey PA 17033-1240, USA Tel: 717/533-8845; Fax 717/533-8661; URL-http://www.igi-pub.com

This paper appears in the publication,

The Knowledge Medium: Designing Effective Computer-Based Educational Learning Environments

by G. Berg © 2003, IGI Global

Chapter III

Tutorial Method: Profiling, Customization and Agents

Ifelt like I had my own tutor (anonymous distance learning student, 2001 survey).

The two major approaches to distance learning are group and tutorial. In this chapter I concentrate on individual tutorial practices and principles applied to computer educational environments. One of the most important areas of research in distance learning pedagogy focuses on the ability of computers to customize the learning experience to meet specific learner needs. This customization aspect of distance learning involves structuring the course content in personalized ways through the use of computer agents and other forms of artificial intelligence.

Respondents to the 2001 survey indicated that they feel that one of the roles of effective distance learning is to provide customization. In the following figure we see that 73.2% of the students surveyed responded strongly agreeing or agreeing to the statement, "It is important that courses are customized to meet my specific learning needs and to adjust to my learning style."

Another possible role for computers is to act as automated tutors or learning assistants. The 2001 survey showed that students had a strong interest in having the computer act as a learning assistant. Students responded 89.6% of the time either strong agreement or agreement with the statement, "I would like to have the computer serve as a learning assistant or agent in distance learning courses."

Figure 3: Customization Importance (Questions 1 & 9) Delivery format * It is important that courses are customized to meet my specific learning needs and to adjust to my learning style. Crosstabulation

			It is important that courses are customized to meet my specific learning needs and to adjust to my learning style.				
			strongly agree	agree	disagree	strongly disagree	Total
Delivery format	computer-based	Count	12	31	15	1	59
		% within Delivery format	20.3%	52.5%	25.4%	1.7%	100.0%
	videotape	Count	16	29	16	1	62
		% within Delivery format	25.8%	46.8%	25.8%	1.6%	100.0%
	correspondence	Count	1	3	1		5
		% within Delivery format	20.0%	60.0%	20.0%		100.0%
	other	Count	1				1
		% within Delivery format	100.0%				100.0%
Total		Count	30	63	32	2	127
		% within Delivery format	23.6%	49.6%	25.2%	1.6%	100.0%

Figure 4: Computer as Learning Assistant (Questions 1 & 22) Delivery format * I would like to have the computer serve as a learning assistant or agent in distance learning courses.

I would like to have the computer serve as a learning assistant or agent in distance learning courses stronaly disagree strongly agree agree disagree Total Delivery computer-based Count % within Delivery format 40.4% 48.9% 8.5% 2.1% 100.0% videotape Count % within Delivery format 100.0% 100.0% Total Count 19 24 4 48 % within Delivery format 50.0% 8.3% 100.0%

Crosstabulation

While many argue for the pedagogical advantages of group interaction, for some students this is not preferred. In the following responses from the 2001 survey, students expressed this preference for individual study.

Do not need interaction with others, want to do independently (anonymous distance learning student).

I did not spend a lot of time/energy reading other students' work samples—they were not valuable to me (anonymous distance learning student).

One student expressed a desire for only an advisor relationship with the faculty member.

I wish more classes of this nature were offered with an "advisor" for questions (anonymous distance learning student).

9 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-

global.com/chapter/tutorial-method-profiling-customizationagents/30372

Related Content

Improving Social and Economic Mobility for People With Disabilities Through Online Education

Jessica D. K. Love (2020). Socioeconomics, Diversity, and the Politics of Online Education (pp. 229-243).

 $\underline{\text{www.irma-international.org/chapter/improving-social-and-economic-mobility-for-people-with-disabilities-through-online-education/259109}$

Iranian EFL Learners' Cognitive Styles and Their Explanations of Conceptual Metaphors

Somaye Piriand Dara Tafazoli (2018). *International Journal of Virtual and Personal Learning Environments (pp. 68-78).*

 $\frac{www.irma-international.org/article/iranian-efl-learners-cognitive-styles-and-their-explanations-of-conceptual-metaphors/210436$

Homo Virtualis: Virtual Worlds, Learning, and an Ecology of Embodied Interaction

Leslie Jarmon (2010). *International Journal of Virtual and Personal Learning Environments (pp. 38-56).*

www.irma-international.org/article/homo-virtualis-virtual-worlds-learning/39129

Gears in Motion: Changing Perspectives of Interactions Among Online Presences

Fatemeh Mardi (2020). International Journal of Virtual and Personal Learning Environments (pp. 35-49).

www.irma-international.org/article/gears-in-motion/253833

Developing New Literacies through Blended Learning: Challenges and Lessons Learned in Ontario, Canada

Deborah Kitchener, Janet Murphyand Robert Lebans (2013). *Technologies, Innovation, and Change in Personal and Virtual Learning Environments (pp. 237-253).*

www.irma-international.org/chapter/developing-new-literacies-through-blended/70946